

REMARKS

Entry of the foregoing and further and favorable consideration of the subject application are respectfully requested and such action is earnestly solicited.

As correctly stated in the Official Action, claims 55-96 are pending in the subject application. Claim 96 stands withdrawn from consideration. Claims 55-88 and 92-95 stand rejected. Claims 59, 80, and 89-91 stand objected to.

By the present amendment, claims 59, 60, 63, 70, 80, 81, 84, and 91 have been amended to recite "between about." Support for these amendments can be found, at least, on page 5, lines 28-30; page 6, lines 19-20; and page 7, lines 4-5 of the specification. Accordingly, no new matter has been added.

Rejections Under 35 U.S.C. § 112, First Paragraph

Claims 55-75 stand rejected under 35 U.S.C. § 112, first paragraph, as allegedly not enabled for all species of molluscs. The Examiner argues that Chem. Abs. 91:87852 shows species apparently thriving in an environment containing calcium oxalate. This rejection is respectfully traversed.

Applicant respectfully submits that the reasons snails thrive in the environment of the Chem. Abstracts publication is that snails require calcium for their shells. The Chem. Abstract publication emphasizes that it is the calcium that is important for the effects on reproduction. Because all molluscs have a similar digestive system, the oxalates of the present invention are likely to be toxic to all molluscs, not just certain species. While the Chem Abstract publication might indicate that calcium oxalate is an inoperative

embodiment, this does not mean that Claims 55-75 are not enabled. The mere presence of inoperative embodiments within the scope of a claim does not necessarily render the claim non-enabled. *See M.P.E.P. § 2164.08(b) et seq.* Rather, the question is whether the skilled artisan can determine which embodiments would be inoperative or operative without undue experimentation. *Atlas Power Co. v. E.I. du Pont de Nemours & Co.*, 750 F.2d 1569, 1577, 224 U.S.P.Q. 409, 414 (Fed. Cir. 1984). Applicant respectfully submits that there are a limited number of insoluble metal oxalates and that the specification provides examples of determining the repellency/toxicity of metal oxalates to molluscs (beginning on page 9 in the Examples). Therefore, one skilled in the art would be able to readily determine whether a particular metal oxalate, including calcium oxalate, is inoperative.

Accordingly, Applicant respectfully submits that the claims meet the requirements of 35 U.S.C. § 112, first paragraph. Withdrawal of this rejection is respectfully requested.

Claim Objections

Claims 59 and 80 stand objected to under 37 C.F.R. § 1.75(c) as allegedly improper for failing to further limit the claims from which they depend. By the present amendment, these claims have been amended to recite "between about 2% and 100%." Therefore, it would be clear that the claims do not read on 100% *per se*, as this would not be logical based on the language of Claims 55 and 76. Withdrawal of this rejection is respectfully requested.

Rejections Under 35 U.S.C. §§ 102(b)/103(a)

Claims 55-60, 71, 72, 74-81, and 92-94 stand rejected under 35 U.S.C. § 102(b) as allegedly anticipated by or, alternatively, obvious under 35 U.S.C. § 103(a) over Ikari *et al.* (EP 485213). The Examiner argues that Ikari *et al.* disclose antifouling compositions containing copper oxalate and other agents. The Examiner asserts that Ikari *et al.* further disclose copper oxalate from about 1-50 wt% and that the composition can be applied to underwater surfaces. This rejection, to the extent that it applies to the claims as amended, is respectfully traversed.

To anticipate a claim under 35 U.S.C. § 102, a publication must disclose or suggest all of the claimed elements. Applicant respectfully submits that the Ikari *et al.* publication does not meet this requirement. Independent claim 55 recites a method for treating an article with a mollusc repellent composition comprising applying to the surface of an article an effective amount of a substantially insoluble metal oxalate and a suitable carrier therefor. Independent claim 76 recites the mollusc repellent composition comprising an effective amount of a substantially insoluble metal oxalate and a suitable carrier therefor.

Applicant respectfully submits that the main toxic compound of Ikari is the 1,2,4-triazole derivative together with at least one soluble dithiocarbamic acid derivative possessing a dithiocarbamic. The inorganic copper compound is considered an optional feature by Ikari *et al.* There is no evidence or suggestion that the copper compound, such as copper oxalate, plays an active role or is essential for the purpose of antifouling. Present independent claims 55 and 76 require an "effective amount" of a substantially insoluble molluscicidal metal oxalate. As Ikari *et al.* consider the copper compound to be optional,

Ikari et al. do not fairly disclose or suggest such an effective amount. Indeed, Ikari et al. deem the triazole and dithiocarbamic acid compounds as the active ingredients.

Moreover, the advantage of the present invention is that an insoluble metal oxalate, such as copper oxalate, can be used on its own without the presence of the triazole and dithiocarbamic acid compounds. These compounds of Ikari et al. may have detrimental effects on the aquatic environment. Thus, the ability to use the metal oxalate by itself would be environmentally beneficial.

Applicant therefore submits that the Ikari et al. publication does not anticipate the presently claimed invention because it does not disclose or suggest that copper oxalate can be used effectively to repel molluscs by itself, *i.e.*, no "effective amount" of the copper oxalate is disclosed or suggested. Rather, the Ikari et al. publication requires the additional active ingredients, the triazole and dithiocarbamic acid compounds. Accordingly, withdrawal of this rejection is respectfully requested.

Rejections Under 35 U.S.C. § 103(a)

Claims 55-67, 71, 72, 74-88, and 92-95 stand rejected under 35 U.S.C. § 103(a) as purportedly obvious over Ikari et al. In addition to the alleged disclosure of Ikari et al. noted above, the Examiner asserts that Ikari et al. disclose incorporation of additives and fouling problems of ship hulls and cooling systems. The Examiner argues that a formulation as an aqueous suspension, incorporation of fungicide, and the specific carriers of Claim 95 would be obvious to one skilled in the art. This rejection, to the extent that it applies to the claims as amended, is respectfully traversed.

In order to establish a case of *prima facie* obviousness, three basic criteria must be met: (1) there must be some suggestion or motivation to modify the reference or combine reference teachings, (2) there must be a reasonable expectation of success, and (3) the prior art reference(s) must teach or suggest all of the claim limitations. *See M.P.E.P. §2142.* Applicant respectfully submits that the Examiner has not established a *prima facie* case of obviousness.

Applicant has demonstrated above that Ikari et al. fail to disclose an "effective amount" of the substantially insoluble molluscicidal copper oxalate. Therefore, the Ikari et al. publication does not disclose or suggest each and every claim element.

Further, with regard to dependent claims 62, 63, 83, and 84, Applicant respectfully submits that Ikari et al. do not disclose or suggest a binder. The binder of the presently claimed invention allows the composition to effectively adhere to the surface of the article.

The Examiner does not cite any other publication to remedy the deficiencies of the Ikari et al. publication. As Ikari et al. do not disclose or suggest all of the claim elements, this publication cannot render the present invention obvious. Accordingly, withdrawal of this rejection is respectfully requested.

Allowable Subject Matter

Applicant gratefully acknowledges the Examiner's indication that claims 89-91 contain allowable subject matter.

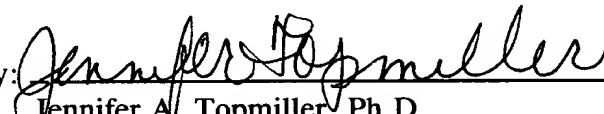
Conclusions

From the foregoing, further and favorable action in the form of a Notice of Allowance is respectfully requested and such action is earnestly solicited.

If there are any questions concerning this amendment, or the application in general, the Examiner is respectfully urged to telephone the undersigned so that prosecution of this application can be expedited.

Respectfully submitted,

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Attachment to REPLY & AMENDMENT dated February 5, 2003

Marked-up Claims - 59-60, 63, 70, 80-81, 84 and 91

59. (Amended) The method of claim 55, wherein the amount of metal oxalate is between about 2% to 100% by weight of the total composition.

60. (Amended) The method of claim 59, wherein the amount of metal oxalate is between about 2% to 10% by weight of the total composition.

63. (Amended) The method of claim 62, wherein the binder comprises between about 0.1% and 100% by weight of the carrier.

70. (Amended) The method of claim 68, wherein the growth hormone comprises between about 0.05% and 1% by weight of the total composition.

80. (Amended) The mollusc repellent composition of claim 76, wherein the amount of metal oxalate is between about 2% to 100% by weight of the total composition.

81. (Amended) The mollusc repellent composition of claim 80, wherein the amount of metal oxalate is between about 2% to 10% by weight of the total composition.

84. (Amended) The mollusc repellent composition of claim 83, wherein the binder comprises between about 0.1% and 100% by weight of the carrier.

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91. (Amended) The mollusc repellent composition of claim 89, wherein the growth hormone comprises between about 0.05% and 1% by weight of the total composition.